

PROJECT TITLE : TOBACCO STUDIES  
PERIOD COVERED : JULY 28 - AUGUST 27 1981  
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#### TOBACCO LOT ANALYSES

##### Introduction of Inputs on EDP

Partial analytical results of twenty-six lots were introduced in the PME Analytical Data List.

##### Lots under Evaluation

Forty-two lots.

##### Lots Available, but not yet Analyzed

A hundred and twenty-seven lots.

##### Miscellaneous

As our capacity is considerably reduced due to the LIBRARY trials, a priority listing of the samples available is necessary. It is based on the elimination of lots of similar grades from the same suppliers. At this time, the analyses of nineteen FC samples, thirty-five BUR samples, eight OR samples and six reconstituted tobaccos have been postponed. This represents approximately half of the total number of samples available.

Among the lots under evaluation with a high priority, there are fourteen samples of US MD tobacco, 1980 crop. There seems to be a problem with their chemical analyses (TA too high).

#### ASSISTANCE TO OTHER PROJECTS

##### NINO Project

The analyses of the "RL sheet NINO" and of the corresponding base web are available.

The main differences of the base web compared with the "RL sheet NINO" are:

a) Sheet and Tobacco Analyses

- lower level of extractable substances (TA, RS,  $\text{NH}_3\text{-N}$ , K, Ash, Mg)
- higher level of Ca due to the lack of extractable substances
- higher filling power
- greater breaking resistance
- lower sheet density
- lower combustibility.

b) Cigarette Analyses

- lower tobacco weight
- greater firmness.

c) Smoke Analyses

- higher CO, NO, DPM, HCN, aldehyde deliveries and puff count per cigarette and per gram of burnt tobacco
- lower SN delivery per cigarette and per gram of burnt tobacco.

An estimate was made of the smoke delivery per gram of burnt "fiber" (non HWS material). The first results show that the CO and DPM deliveries are more or less similar and that the NO, HCN and aldehyde deliveries are higher for the base web. This NO result is surprising considering that the  $\text{NO}_3\text{-N}$  levels of the two trials are similar.

LEAR Project

We have received one sample of BUR strips (control).

LIBRARY Project

The analyses of the first samples (normal TLA) of the second series of trials are under way.

## MISCELLANEOUS

### Maryland Tobacco, Influence of Storage (1)

This trial was made in order to determine whether the influence of the storage in the USA is the same as in Europe (Onnens). The examination of the tobacco is based on organoleptic and chemical characteristics. Two different grades of US MD tobacco have been tested. Ten samples of each grade were taken from Onnens and ten samples from the USA at the beginning of the storage (1979). A similar sample was taken after one year of storage.

The main differences due to the storage are:

- lower TA level, significant for the four trials
- lower Tot-N level, significant for three trials out of four
- lower NO<sub>3</sub>-N level, significant for one trial out of four
- higher ash level.

It is difficult to see differences in the smoke analyses due to the different tobacco weights and RTDs of the trial cigarettes. Only the cigarettes of the 7XCBF/S grade stored at Onnens had small differences of tobacco weight and RTD. The smoke analyses per gram of burnt tobacco after one year of storage show:

- slightly higher CO delivery
- lower NO delivery
- slightly higher DPM delivery (this result does not appear to be confirmed by the DPM results of the other grade stored at Onnens)
- non significant difference in the SN delivery
- higher HCN delivery
- higher aldehyde delivery.

In general, the place of storage would not appear to have any influence on the chemical analyses.

### Reference

1. Mr. Karlé's Report: "Chemical, Physical and Organoleptic Examination of MD Tobaccos..., of May 12, 1978", dated September 19th, 1978.

LIJ/nod/SEPTEMBER 3 1981

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